

KBPC10005W THRU KBPC1010W

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 10.0 Ampere

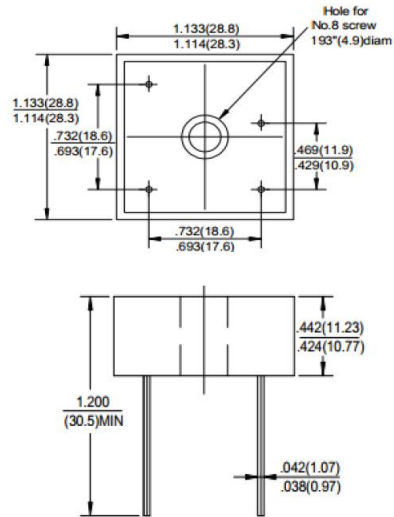
FEATURES

- ◆ High overload surge current capability
- ◆ Low thermal resistance
- ◆ High isolation voltage from case to leads
- ◆ High temperature soldering guaranteed:
260°C/10 second, at 5 lbs. (2.3kg) tension

MECHANICAL DATA

- ◆ Case: Metal case
- ◆ Terminal: Plated lead 0.04" (1.02mm) diameter
- ◆ Polarity: Polarity symbols marked on case
- ◆ Mounting: Thru hole for #8 screw, 20 in.- lbs. Torque Max
- ◆ Weight: 0.93 ounce, 26.4gram

KBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current @ $T_C=55^\circ\text{C}$ (Note 1, 2)	$I_{F(AV)}$	10.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	240.0							A
Maximum instantaneous forward voltage at 5.0 A	V_F	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=150^\circ\text{C}$	I_R	5.0							A
		0.5							mA
Isolation Voltage from case to lug	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	R_{qJC}	2.0							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Unit mounted on 5"×4"×3" thick (12.8mm×10.2mm×7.3mm) Al. plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC1005W THRU KBPC1010W

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RATING AND CHARACTERISTIC CURVES KBPC1005W THRU KBPC1010W

FIG.1 – PEAK FORWARD SURGE CURRENT

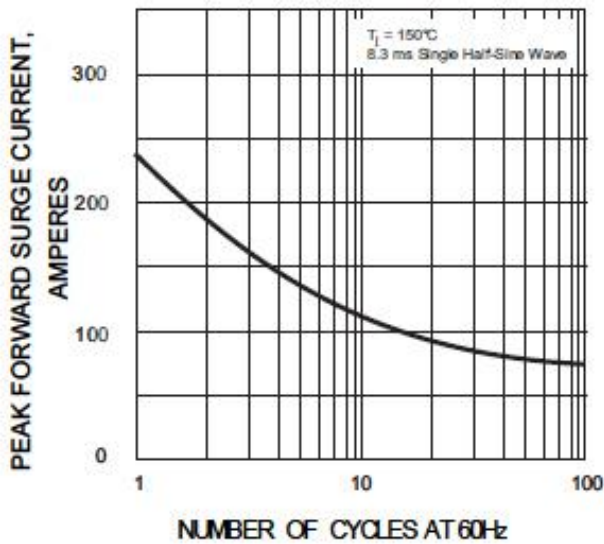


FIG.2 – FORWARD DERATING CURVE

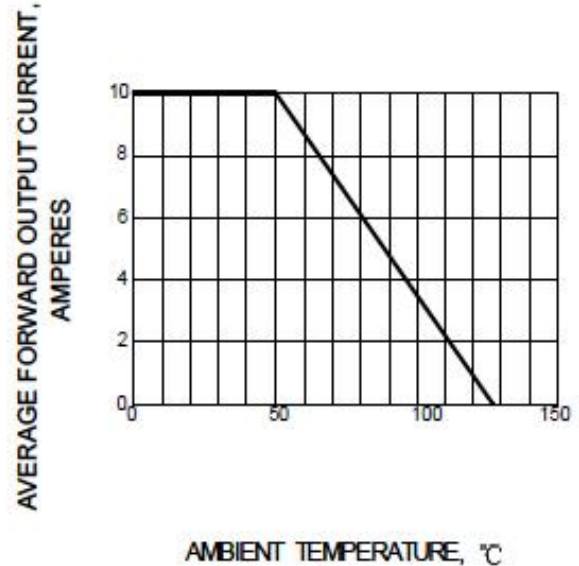


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

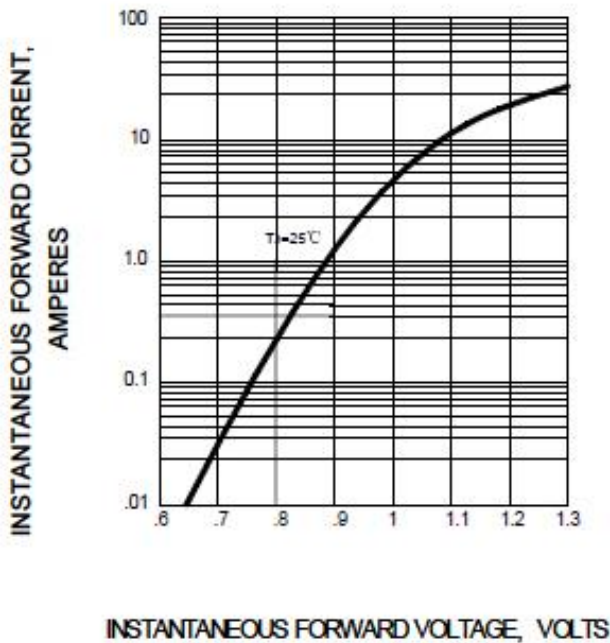
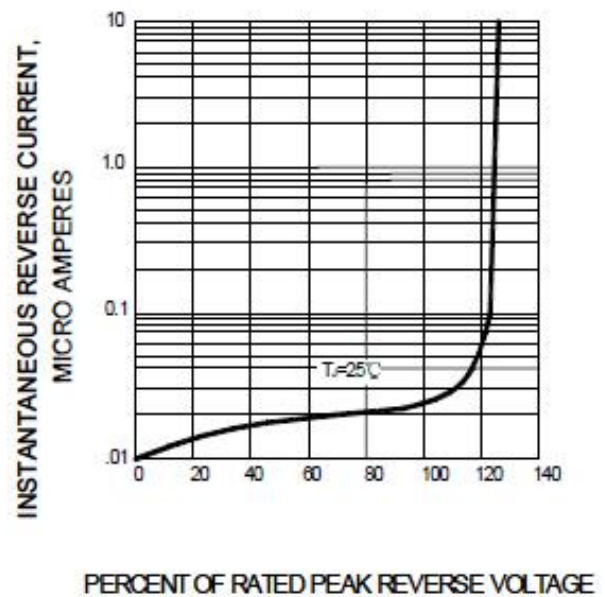


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.